A6 Cont

changing noise removal processing for the respective areas of the image in response to the determined levels of importance.

IN THE ABSTRACT

Please delete the Abstract at page 60 in its entirety and insert the following new Abstract:

A7

ABSTRACT OF THE DISCLOSURE

A camera apparatus including a camera unit which acquires an image, a line-of-sight detection unit which detects a point of eye fixation of a user within a camera screen, and an importance computation unit which determines levels of importance for respective areas of the image acquired by the camera unit in accordance with the detection by the line-of-sight detection unit. Also included is a number-of-gray-scale-level determining unit which changes a number of gray scale levels for the respective areas of the image in response to the determination by the importance computation unit.

REMARKS

Favorable consideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 14-26 are pending in the present application. Claims 1-13 have been cancelled and Claims 14-26 have been added by the present amendment.

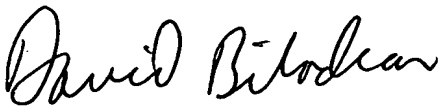
A certified translation for this application was filed on March 22, 2001. In the certified translation, the claims appeared in the first six pages of the translation and the description of the drawings was placed at the end of the translation. Accordingly, this Preliminary Amendment amends the specification to conform with standard U.S. patent

practice. For example, pages 1-6 of the specification have been deleted and a brief description of the drawings has been properly placed between the summary of the invention and description of the preferred embodiments sections of the specification. Further, original Claims 1-13 have been replaced with new Claims 14-26, which have been drafted to correspond with standard U.S. claim drafting practice. No new matter has been added.

Accordingly, an action on the merits is earnestly solicited.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.



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09/726,559
Amendment Filed on:
5/16/01

IN THE SPECIFICATION

Please delete pages 1-6 in their entirety.

Page 7, before line 1, insert the following:

--TITLE OF THE INVENTION

CAMERA APPARATUS AND METHOD OF TAKING PICTURES

BACKGROUND OF THE INVENTION

FIELD OF THE INVENTION.--

Page 7, delete line 5 and insert:

--DISCUSSION OF THE BACKGROUND--.

Page 12, delete line 4 in its entirety.

Page 13, between lines 19-20, insert:

--SUMMARY OF THE INVENTION--.

Page 14, delete line 7 in its entirety.

Page 17, delete line 19 in its entirety and insert the following new paragraphs:

--BRIEF DESCRIPTION OF THE DRAWINGS

A more complete appreciation of the invention and many of the attendant advantages thereof will be readily obtained as the same becomes better understood by reference to the following detailed description when considered in connection with the accompanying drawings, wherein:

Fig. 1 is a block diagram showing a configuration of an embodiment of a digital camera according to the present invention;

Fig. 2 is a drawing showing an embodiment of a configuration of a line-of-sight detection unit;

Fig. 3 is a drawing showing the way a display screen is divided into a plurality of blocks in order to detect a point of fixation by the unit of one block;

Fig. 4 is a drawing showing the importance of the pixel of interest and positional relationship between the area of importance and the pixel of interest;

Fig. 5 is a drawing showing a Gaussian distribution function that defines levels of importance;

Fig. 6 is a drawing showing the way two areas of importance are specified in an image;

Fig. 7 shows the importance of position (x, y) in the image with respect to the first area of importance and the second area of importance;

Fig. 8 is a drawing showing a contour pattern of importance in a case where the area of importance is defined as a small ellipse region of the image;

Fig. 9 is a drawing showing an example of importance that is quantized into five levels;

Fig. 10 is a block diagram showing a functional block configuration of an image processing unit;

Fig. 11 is a drawing showing quantized importance levels that are assigned to respective areas of an image with reference to an example in which the area of importance is an ellipse shape;

Fig. 12 is an example of blocks into which an image is divided horizontally and vertically;

Fig. 13 is an example of blocks having different shapes into which an image is divided;

Fig. 14 is a block diagram showing an example of a hardware configuration including an image output apparatus;

Fig. 15 is a flowchart showing a first embodiment of a process of making image quality vary depending on levels of importance;

Fig. 16 is a flowchart showing a second embodiment of a process of making image quality vary depending on levels of importance;

Fig. 17 is a drawing showing a configuration of a color filter in the case of a camera device being a primary color array CCD;

Fig. 18 is a drawing showing the pixel of interest and four neighboring pixels for the purpose of color interpolation processing;

Fig. 19 is a drawing showing an example of a wide area of interpolation reference that corresponds to the case of great importance;

Fig. 20 is a flowchart showing a third embodiment of a process of making image quality vary depending on levels of importance;

Fig. 21 is a drawing showing the pixel of interest and neighboring pixels for the purpose of sharpness enhancement processing;

Fig. 22 is a drawing showing a non-linear transformation applied to Laplacian operation; and

Fig. 23 is a flowchart showing a fourth embodiment of a process of making image quality vary depending on levels of importance.--

--DESCRIPTION OF THE PREFERRED EMBODIMENTS

Referring now to the drawings, wherein like reference numerals designate identical or corresponding parts throughout the several views, the present invention will be described.--

Page 59, delete lines 1-20 and insert therefor:

--What is Claimed Is:--

IN THE CLAIMS

Claims 1-13 have been canceled without prejudice.

New Claims 14-26 have been added.

IN THE ABSTRACT

Please delete the Abstract at page 60 in its entirety and insert the following new Abstract:

--ABSTRACT OF THE DISCLOSURE

A camera apparatus including a camera unit which acquires an image, a line-of-sight detection unit which detects a point of eye fixation of a user within a camera screen, and an importance computation unit which determines levels of importance for respective areas of the image acquired by the camera unit in accordance with the detection by the line-of-sight detection unit. Also included is a number-of-gray-scale-level determining unit which changes a number of gray scale levels for the respective areas of the image in response to the determination by the importance computation unit.--